

Standard Authorization Request Form

Title of Proposed Standard	Supplemental SAR for Project 2009-06 Facility Ratings
Request Date	March 13, 2011
Date SC Approved Posting	March 14, 2011

SAR Requester Information		SAR Type <i>(Check a box for each one that applies.)</i>	
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Primary Contact	Andrew Rodriquez	<input checked="" type="checkbox"/>	Revision to existing Standard FAC-008-2
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Purpose (Describe what the standard action will achieve in support of bulk power system reliability.)

To address the reliability concerns related to Facility Ratings initially discussed in paragraphs 756 and 771 of FERC's Order 693, and further explained in paragraph 76 of FERC's "Order Denying Rehearing, Denying Clarification, Denying Reconsideration, and Denying Request for a Stay," issued September 16, 2010. These concerns relate to ensuring that information that may be helpful to operations and planning entities regarding the rating of the most limiting equipment of a Facility. NERC believes that industry can address these concerns through an equally effective and efficient alternative to the proposal directed by the Commission involving the development of a single additional requirement in FAC-008 – Facility Ratings.

The Commission has issued an agenda indicating it may issue an Order on March 17, 2011 that will establish a deadline for completion and filing by June 15, 2011.

Industry Need (Provide a justification for the development or revision of the standard, including an assessment of the reliability and market interface impacts of implementing or not implementing the standard action.)

In Order 693, FERC explained in paragraph 756:

"...The Commission's proposed modification would require identifying and documenting the limiting component for all facilities and the increase in rating if that component were no longer the most limiting component; in other words, the rating based on the second-most limiting component. The Commission further clarifies that this Reliability Standard will require this additional thermal rating information only for those facilities for which thermal ratings cause the following: (1) an IROL; (2) a limitation of TTC; (3) an impediment to generation deliverability or (4) an impediment to service to major cities or load pockets."

And provided further direction in paragraph 771:

"...we direct the ERO to develop modifications to FAC-008-1 through its Reliability Standards development process requiring transmission and generation facility owners to: (1) document underlying assumptions and methods used to determine normal and emergency facility ratings; (2) develop facility ratings consistent with industry standards developed through an open, transparent and validated process and (3) for each facility, identify the limiting component and, for critical facilities, the resulting increase in rating if that component is no longer limiting."

FERC later explained in paragraph 76 of its September 16, 2010 Order Denying Rehearing, Denying Clarification, Denying Reconsideration, and Denying Request for a Stay:

"In order to determine facility ratings, entities must identify the most limiting component that comprises the facility, based on a validated methodology that considers the specific characteristics and ratings of all of the components to determine their limits for a range of ambient conditions, including if and for what duration these limits can be exceeded. This is, in part, because the limiting element upon which a facility rating is based can change under different operating conditions. For example, an underground high voltage cable may be the limiting element for continuous ratings, but a disconnect switch may be the limiting element for a four-hour emergency rating. With heavy power flows from generators through critical facilities to load, contingency conditions could reveal a thermal overload above the normal rating of the first limiting component of one of these facilities. However, that component also likely has a documented short time rating that could sustain the

overload. If the second-most limiting component does not afford much increase in rating above the first, and its overload can result in the unintended removal of the facility from service (i.e., a relay or other protection system component that trips a facility out of service due to the overload), the prior identification of this second limiting component could alter the mitigation plans and avoid relay operations that trip facilities out-of-service, and thus potentially prevent a cascading event.”

NERC believes the concerns discussed in paragraph 76 are legitimate concerns that Stakeholders can address through an equally effective and efficiently alternative to the proposal directed by the Commission through the addition of a single requirement to the latest approved version of FAC-008-2 – Facility Ratings. The additional requirement will provide entities the opportunity to obtain additional details about the ratings of equipment that may be helpful for Reliability Coordinators, Transmission Operators, Transmission Planners, and Planning Coordinators when developing some operational plans or when conducting some planning studies.

Taking such action is consistent with the FERC Orders and the original SAR for the predecessor to this project: Project 2006-09 Facility Ratings.

NERC must produce a standard that addresses this directive to comply with paragraph 29 of FERC’s March 18 Order Directing NERC to Propose a Modification of ERO Rules of Procedure:

“Moreover, consistent with the Commission’s regulations, we direct the ERO, within 90 days of our subsequent order on proposed modifications to the ERO’s rules, to comply with the Commission’s directive in Order No. 693 to modify Reliability Standard FAC-008-1. As explained in greater detail in Order No. 693, the required modifications include (1) document underlying assumptions and methods used to determine normal and emergency facility ratings; (2) develop facility ratings consistent with industry standards developed through an open, transparent and validated process; and (3) for each facility, identify the limiting component and, for critical facilities, the resulting increase in rating if that component is no longer limiting.”

NERC currently anticipates the Commission issuing such an order on March 17, 2010, which would result in a deadline for completion of June 15, 2011.

NERC does not expect there to be any market impacts from this standards action.

Brief Description (Provide a paragraph that describes the scope of this standard action.)

NERC proposes to add an additional requirement to FAC-008-2 that will address the area of concern expressed in the Commission’s orders. This SAR is limited solely to the addition of this requirement and the associated measure and compliance information needed to support the requirement.

Detailed Description (Provide a description of the proposed project with sufficient details for the standard drafting team to execute the SAR.)

NERC proposes to add a requirement to FAC-008-2 that addresses the following directive from Order 693:

(3) for each facility, identify the limiting component and, for critical facilities, the resulting increase in rating if that component is no longer limiting.”

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Further, NERC requests that measures and Compliance Elements be developed in support of this requirement.

Reliability Functions

The Standard will Apply to the Following Functions <i>(Check box for each one that applies.)</i>		
<input type="checkbox"/>	Reliability Assurer	Monitors and evaluates the activities related to planning and operations, and coordinates activities of Responsible Entities to secure the reliability of the bulk power system within a Reliability Assurer Area and adjacent areas.
<input type="checkbox"/>	Reliability Coordinator	Responsible for the real-time operating reliability of its Reliability Coordinator Area in coordination with its neighboring Reliability Coordinator's wide area view.
<input type="checkbox"/>	Balancing Authority	Integrates resource plans ahead of time, and maintains load-interchange-resource balance within a Balancing Authority Area and supports Interconnection frequency in real time.
<input type="checkbox"/>	Interchange Authority	Ensures communication of interchange transactions for reliability evaluation purposes and coordinates implementation of valid and balanced interchange schedules between Balancing Authority Areas.
<input type="checkbox"/>	Planning Coordinator	Assesses the longer-term reliability of its Planning Coordinator Area.
<input type="checkbox"/>	Resource Planner	Develops a >one year plan for the resource adequacy of its specific loads within its portion of the Planning Coordinator's Area.
<input checked="" type="checkbox"/>	Transmission Owner	Owns and maintains transmission facilities.
<input type="checkbox"/>	Transmission Operator	Ensures the real-time operating reliability of the transmission assets within a Transmission Operator Area.
<input type="checkbox"/>	Transmission Planner	Develops a >one year plan for the reliability of the interconnected Bulk Electric System within the Transmission Planner Area.
<input type="checkbox"/>	Transmission Service Provider	Administers the transmission tariff and provides transmission services under applicable transmission service agreements (e.g., the pro forma tariff).
<input type="checkbox"/>	Distribution Provider	Delivers electrical energy to the End-use customer.
<input type="checkbox"/>	Generator Owner	Owns and maintains generation facilities.
<input type="checkbox"/>	Generator Operator	Operates generation unit(s) to provide real and reactive power.
<input type="checkbox"/>	Purchasing-Selling Entity	Purchases or sells energy, capacity, and necessary reliability-related services as required.
<input type="checkbox"/>	Load-Serving Entity	Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.

Reliability and Market Interface Principles

Applicable Reliability Principles <i>(Check box for all that apply.)</i>	
<input checked="" type="checkbox"/>	1. Interconnected bulk power systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.
<input type="checkbox"/>	2. The frequency and voltage of interconnected bulk power systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
<input checked="" type="checkbox"/>	3. Information necessary for the planning and operation of interconnected bulk power systems shall be made available to those entities responsible for planning and operating the systems reliably.
<input type="checkbox"/>	4. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained and implemented.
<input type="checkbox"/>	5. Facilities for communication, monitoring and control shall be provided, used and maintained for the reliability of interconnected bulk power systems.
<input type="checkbox"/>	6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.
<input checked="" type="checkbox"/>	7. The security of the interconnected bulk power systems shall be assessed, monitored and maintained on a wide area basis.
<input type="checkbox"/>	8. Bulk power systems shall be protected from malicious physical or cyber attacks.
Does the proposed Standard comply with all of the following Market Interface Principles? <i>(Select 'yes' or 'no' from the drop-down box.)</i>	
1. A reliability standard shall not give any market participant an unfair competitive advantage. Yes	
2. A reliability standard shall neither mandate nor prohibit any specific market structure. Yes	
3. A reliability standard shall not preclude market solutions to achieving compliance with that standard. Yes	
4. A reliability standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards. Yes	

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Related Standards

Standard No.	Explanation
FAC-008-2	Facility Ratings – FAC-008-2 was developed and approved by its ballot pool and the NEC Board of Trustees but has not been filed for approval by any regulatory or governmental authority. FAC-008-2 will be replaced by FAC-008-3 and only FAC-008-3 will be filed for regulatory and governmental approvals.

Related SARs

SAR ID	Explanation
Original SAR for Project 2009-06	The SAR for Project 2009-06 is being supplemented to expand the scope of the project to address all three directives associated with FAC-008-1 as identified in Order 693.
Original SAR for Project 2006-09	The SAR for Project 2009-06 replaced the SAR for Project 2006-09.

Regional Variances

Region	Explanation
ERCOT	
FRCC	
MRO	
NPCC	
SERC	
RFC	
SPP	
WECC	